# OPERATORS' GUIDE



#### **WARNING**



All information found in this guide must be read and understood before use or testing of tool.

Failure to read and understand warnings and safe handling instructions could result in severe personal injury and or death.

The REL-HPU-2000 provides all the power needed to operate any standard Type I or Type II hydraulic equipment.

The Briggs & Stratton 18 hp gasoline engine delivers 2,000 psi of hydraulic pressure at either selected flow setting of 5 or 8 GPM.



#### **DISTRIBUTED BY**



#### THIS SYMBOL INDICATES ITEMS OF EXTREME IMPORTANCE.

Safety of user and others may be in jeopardy if these instructions are not read and understood.

Failure to observe these warnings could result in serious injury or death.



The information in this manual is intended to guide the user in the use and application of this tool. It is not intended as a substitute for proper training and experience in safe work practices for this type of equipment.

Consult your supervisor or safety personnel if you have any questions regarding the safe operation of this tool.

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# **REGISTRATION**

UPON RECEIPT OF THIS TOOL, COMPLETE THE REGISTRATION BELOW	
COMPANY	
ADDRESS	
PHONE	FAX
SERIAL NUMBER	
DATE OF PURCHASE	
DEALER NAME	

# RELIABLE EQUIPMENT & SERVICE CO., INC.

# REL-HPU-2000

# 2,000 PSI - PUMP 18 HP Gasoline/Hydraulic

The REL-HPU-2000 provides all the power needed to operate any standard Type I or Type II hydraulic equipment. The Briggs & Stratton 18 hp gasoline engine delivers 2,000 psi of hydraulic pressure at either user selected flow setting of 5 or 8 gallons per minute. Automatic throttling feature ensures consistent performance throughout tool operation.

The oil cooler with high speed blower reduces operating temperatures and related system wear.

The electric start, flow selector, and control valve are located on the front panel for operator convenience, while the choke, fuel fill, and hour meter remain within easy reach.



The easy access battery compartment located at the front of the unit holds a 35-Ah maintenance-free battery. The convertible handle and 12 inch pneumatic tires provide ease of movement into hard to access areas.



Meets HTMA performance standards.

#### **SPECIFICATIONS**

Engine: Briggs & Stratton
Vanguard - V-Twin
Flow Range: 5-8 GPM 20or30lpm

Operating Pressure: 2,000 PSI 140 bar Circuit Type: **Open Center** Hydraulic Reservoir: 3 Gallons 11 liters 26.5 liters Fuel Tank: 7 Gallons 73.7 cm 29 inches Height: Length (Handle Down): 35 inches 89 cm Width: 21.5 inches 54.6 cm 330 lbs. Weight 150 kg

RELIABLE EQUIPMENT & SERVICE CO., INC.

92 STEAMWHISTLE DRIVE • IVYLAND, PA 18974 TOLL FREE: 800-966-3530 • FAX: 215-357-9193 Visit us on the web at www.Reliable-Equip.com



WARNING

BEFORE USING THIS TOOL, READ THE WARNINGS

and the recommended practices described in this manual. Failure by the operator to read and fully understand these warnings will leave this person unqualified to use and operate this tool. Property damage, severe personal injury, and/or death could result by not following these warnings.

These warnings will appear in appropriate locations when they are pertinent to the particular subject being shown. Read each one carefully and follow them strictly.



Eye Protection

#### WARNING

Always wear eye protection to avoid injury from flying debris or hydraulic oil leaks. Failure to do so can result in serious personal injury.



#### Skin Irritation

#### WARNING

Hydraulic oil may cause irritation. Use care to prevent contact with skin. In case of accidental contact, wash affected area immediately



#### Hard Hat

#### WARNING

Always wear a hard hat to avoid injury from falling debris. Failure to do so can result in serious personal injury.



#### Foot Protection

#### **WARNING**

Always wear foot protection.

Failure to do so can result in serious personal injury.



#### Hearing Protection

#### WARNING

Always wear hearing protection, to avoid hearing loss due to long term exposure to high noise levels.



#### Protective Gloves

#### WARNING

Always wear protective gloves & cloths. Failure to do so can result in serious personal injury.



#### SAFE OPERATION & CARE

USE THIS TOOL FOR ITS INTENDED PURPOSE ONLY Any other use can result in injury or property damage.

**INSPECT TOOL BEFORE USE.** Replace any worn, damaged or missing parts. A damaged or improperly assembled tool may malfunction, injuring operator and/or nearby personnel.

**INSPECT HYDRAULIC HOSES AND COUPLINGS** before each use. Repair or replace if any cracking, leakage, wear or damage is found. Worn or damaged hoses may fail resulting in personal injury or property damage.

**CLEAR WORK AREA** of all bystanders and unnecessary personnel before operating this tool.

KEEP ALL PARTS OF THE BODY AWAY FROM MOVING PARTS.

Failure to observe this warning could result in serious injury.



#### HYDRAULIC POWER SUPPLY

<u>DO NOT attempt to make any changes</u> to any of the component parts or accessories when connected to the power source.

<u>DO NOT adjust, inspect, or clean any tool</u> while the tool is connected to the power source. The tool could accidentally start up and cause serious injury.

<u>DO NOT lock the tool in the On Position.</u> In an emergency, serious damage or injury could occur during the time required to stop the tool.



#### OIL INJECTION INJURY

Hydraulic oil or fluid under the skin is a serious injury. Oil under pressure can penetrate the skin and may cause dismemberment or loss of life. Seek medical assistance immediately if such an injury should occur.

Always wear safety gloves, eye protection and all required safety equipment when operating or handling this tool.

DO NOT use fingers or hands to attempt to locate a leak.

DO NOT handle hoses or couplers while system is pressurized.

NEVER open or service the system before depressurizing.



#### HOSES AND FITTINGS

There exists the potential for shock in using anything other than certified non-conductive hoses and hydraulic oil with dielectric properties, when using system components near energized electrical lines. Failure to recognize these conditions could cause electrocution.

Hoses and fittings used with this tool must comply with S.A.E. J1273 which covers recommended practice for selection, installation, and maintenance of hose and hose assemblies. The correct hoses and fittings are available from your supplier.

**WARNING:** Failure to comply with these warnings could result in severe bodily injury or death.



#### **UNIT/HOSE CONNECTIONS**

**ALWAYS DISCONNECT** pump/power source and turn the key to the **OFF** position before connecting or disconnecting any components.

<u>ALWAYS DEPRESSURIZE</u> hydraulic system, before slowly disconnecting this unit or any of the systems components.

**ALWAYS TIGHTEN COUPLINGS COMPLETELY.** Loose or improperly tightened couplings will not allow fluid to pass through the hose creating a blockage in the supply or return line.

<u>ALWAYS INSPECT HOSES AND CONNECTORS</u> before connection to tool. Replace or repair if any leakage is evident. Leakage is a sign of deterioration in component parts.

Connect hoses and confirm proper flow direction to & from tool.



#### SERIOUS BURN HAZARD

HOT SURFACES & EXHAUST MAY CAUSE SERIOUS BURN INJURY

The hydraulic cylinder may be hot during and after operation.

CAUTION: HYDRAULIC FLUID MAY CAUSE SERIOUS BURNS

Never disconnect tool, hoses, or fittings while the hydraulic power source is running or if the hydraulic fluid is hot.

**NEVER** add fuel to the power unit while the unit is running or hot.

IF YOU HAVE ANY QUESTIONS REGARDING THE SAFE USE AND/OR OPERATION OF THIS TOOL, CONSULT YOUR AREA SUPERVISOR, OR CONTACT RELIABLE EQUIPMENT AT 800-966-3530



#### **COMBUSTION HAZARD**

**NEVER** add fuel to the power unit while the unit is running or hot.

**DO NOT** operate the power unit if gasoline odor is present.

**DO NOT** use the power unit around flammable solvents.

**DO NOT** operate power unit within 3.3 ft. (1 M) of buildings, obstructions or other flammable objects.

**ALLOW POWER UNIT TO COOL** completely before storing.



#### ELECTRICAL SHOCK HAZARD

Always wear and use the necessary clothing, equipment and safety practices to protect against electrical shock. Failure to follow these rules can result in serious personal injury or death.



# **GENERAL SAFETY**



**USE ALL APPROPRIATE AND APPLICABLE PERSONAL SAFETY EQUIPMENT** as required by the operating company.

#### **NEVER OPERATE THE REL-HPU-2000 POWER UNIT IN A CLOSED SPACE**

**ALWAYS INSPECT TOOL** for wear or deterioration or damage every day. Worn or damaged parts may cause malfunction of tool or unsafe circumstance.

KEEP ALL BODY PARTS AWAY FROM WORKING PARTS OF THE POWER UNIT. HANDS MUST BE OUTSIDE DANGER ZONES BEFORE ACTIVATING TOOLS MAKE SURE THERE IS NO PERSON IN CLOSE PROXIMITY to you or the tool who could be injured by any operation being performed, tool malfunction or flying debris.

**DO NOT OVEREXTEND** your position by overreaching or unbalancing the footing necessary to maintain physical control of your body.

**ALWAYS MAINTAIN** a firm grip on the tool to avoid loss of control during an operation, causing property damage, serious injury or death.

USE THIS TOOL FOR THE MANUFACTURERS' INTENDED PURPOSE ONLY.
OBSERVE CLOSELY ALL SAFETY RULES FOR A PARTICULAR JOB CLASS

# REL-HPU-2000 MAJOR COMPONENTS - CONTROL SIDE



# **REL-HPU-2000 OPERATION**



**Operation/Safety** methods may vary in accordance with the working guidelines established by each utility or contractor.

For your own safety, ensure that you fully comply with all safe operation guidelines required by your employer.

Consult your training or safety personnel or supervisor as needed.

#### NEVER OPERATE THE REL-HPU-2000 POWER UNIT IN A CLOSED SPACE

Inhalation of exhaust fumes may be fatal.

Do not use this tool under unsafe working conditions or locations.

Read entire manual prior to operation of this tool.

(Refer to all safety recommendations and warnings)

The manufacturers manual for the operation and care of the gasoline engine has been included for your reference. (Refer to all safety recommendations and warnings)

Observe all safety precautions & procedures required by the operating company.

Familiarize yourself with the requirements of the application and the safe operation of any connected tool.

Always check Engine Oil level before starting Power Unit. (see page 11 - Oil Check)

Check Fuel level. (see page 12 - Fill Cap) Fill with unleaded gasoline ONLY.

<u>CAUTION!</u> DO NOT CONFUSE THE GASOLINE AND THE HYDRAULIC FLUID TANKS.

**Check Hydraulic Fluid Level** before beginning operation (refer to Daily Maintenance)

Connect a low pressure hydraulic tool to a hose assembly suited to the application.

A hose, rated to 2,500 psi/72 bar, with a 4 to 1 Safety Factor is recommended.

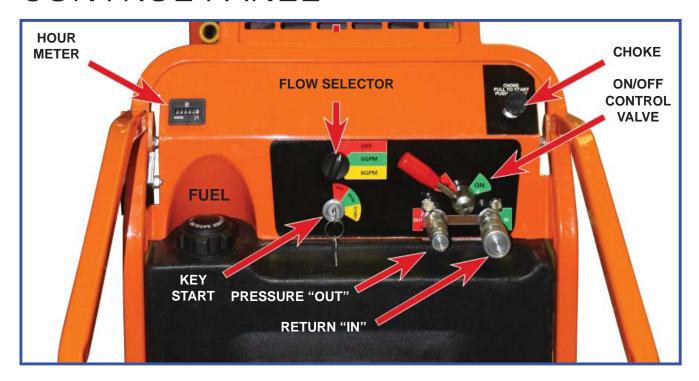
Hose length may vary. Use a length of hose that will not restrict free movement, or pose any hazard to the operator or other personnel on the work site.

Hose assembly should include flush face quick disconnect couplers as recommended by the HTMA. (Hydraulic Tool Manufacturers Association)

Connect the hose assembly to the pressure port and return port connections on the front control panel of the power unit.

**<u>DO NOT</u>** attempt to reverse tool rotation or operation by changing direction of flow.

# CONTROL PANEL



#### START UP

Ensure that the Flow Selector Switch is in the OFF position.

Pull CHOKE knob out.

Turn the KEY to the START position. Release the key when the engine starts.

Gradually push the CHOKE knob in as the engine begins to idle smoothly.

Allow the engine to warm up before beginning tool operation.

#### **OPERATION**

**Select an appropriate flow** for the tool. (Refer to the related Tool Operator's Manual) **Move the Control Valve to the ON position.** 

**Note:** In temperatures below 50° F/10° C the Power unit should be allowed to run at idle (approximately 3-5 minutes) allowing the hydraulic fluid to warm up adequately.

**Operate the tool** as required by the application. Refer to Tool Operator's Manual, and observe ALL required safety guidelines established by the Utility or Contractor.

Move the Control Valve to the OFF position.

Return the Flow Selector Switch to the OFF position when tool operation is stopped.

Turn KEY to the OFF position to shut down the Power Unit

Consult your supervisor, safety personnel, or RELIABLE EQUIPMENT if you have any questions regarding the safe operation of this tool.

## **DAILY MAINTENANCE**



IMPORTANT: The greatest cause of hydraulic system failure is dirt. Prevent the introduction of foreign matter into the unit via hydraulic fluid, dirty connections or accumulation of sediment.

The life, reliability, and safety of the tool is dependent on proper maintenance. Engine Maintenance - refer to the maintenance schedule and general maintenance instructions in the Engine Maintenance and Operation Manual furnished with the power unit. Check Fuel level. Fill with unleaded gasoline ONLY.

#### CAUTION! DO NOT CONFUSE THE GASOLINE AND THE HYDRAULIC FLUID TANKS.

**Check Hydraulic Fluid Level** by checking the dipstick in the reservoir and filling as needed. **Check hydraulic fluid for contamination.** Replacement of the hydraulic fluid is recommended. Change the hydraulic fluid filter every 200 hours of operation.

Inspect unit for wear or damage. Worn or damaged parts may malfunction during operation. All parts must be replaced with new parts if signs of wear or damage are evident. Inspect the fittings, and hydraulic lines. (i.e. kinks, leaks, dirt, etc.) <u>Do Not use hands!</u> Inspect Hoses. Worn or damaged and aged hoses may malfunction during operation. Clean all surfaces before storage, including Control Panel, Couplers, Frame, Blower Grill, Handles, and Tires, etc. NOTE: Do Not Pressure Wash

#### LONG TERM STORAGE

Replace the Engine Oil.

A Fuel Additive may be used in accordance with the manufacturers instructions. Refer to the Engine manufacturers instructions furnished with the power unit.

# **HYDRAULIC FLUIDS**

All hydraulic fluids that meet these listed specifications or the listed HTMA specifications may be used for this tool.

S. U. S.

@ <b>100° F</b> (38° C)	140 TO 225
@ <b>210</b> ° <b>F</b> (99° C)	40 minimum
FLASH POINT	<b>340° F min.</b> (170° C min.)
POUR POINT	<b>-30° F min</b> . (-34° C min.)

NOTE: Keep Label Set clean and legible. Replace decals when necessary. Part #RLHPU2000



**CAUTION** 

BEFORE USING THIS PRODUCT READ THE SAFETY WARNINGS and recommended practices described in the manual. Failure by the operator to read and fully understand the warnings will leave this person unqualified to use and operate the tool.

Failure to observe all warnings and instructions could result in property damage, severe personal injury, and/or death.

#### RELIABLE EQUIPMENT & SERVICE CO., INC.

92 Steamwhistle Drive • Ivyland, PA 18974 • USA Phone: 215-357-3500 • Fax: 215-357-9193

MODEL: REL-HPU-2000 MAX. PRESSURE: <u>2,000 PSI</u> SERIAL NO.: \_\_\_\_\_

YEAR: \_\_\_\_\_

A	CAU	TION	

Operation and safety methods may vary in accordance with the guidelines established by each utility. For your safety, ensure that you fully comply with different care operation guidelines established by your respective power utility.



#### BATTERY

# THIS POWER UNIT IS SUPPLIED WITH A FULLY CHARGED, NON-SPILLABLE, MAINTENANCE FREE, 12 VOLT DC BATTERY.

BATTERY is located behind the BATTERY COVER. Remove COVER BOLT to access. Ensure that connections remain tight and the charging function is operating properly. NOTICE - The battery may drain while the KEY is in the ON or START positions.

Ensure that the KEY is returned to the OFF position whenever the power unit is not running, even if the unit shuts down due to lack of FUEL or other factors.



**CAUTION** 

#### <u>DONOT</u> CHARGE THE BATTERY WITH AN AUTOMOTIVE CHARGER.

Proper charging of this battery requires a charging amperage below 2 amps. Charging the battery at an amperage above 2 amps will damage the battery.



#### PLEASE RECYCLE WHEN BATTERY REPLACEMENT IS REQUIRED.

Federal, State and Local laws may require or allow for battery recycling and disposal. Contact a Recycling Center near you for more information.

IF YOU HAVE QUESTIONS REGARDING THE SERVICE AND REPAIR OF THIS POWER UNIT PLEASE CONTACT RELIABLE EQUIPMENT AT 800-966-3530

## **GENERAL MAINTENANCE**

Engine Maintenance - refer to the maintenance schedule and general maintenance instructions in the Engine Maintenance and Operation Manual furnished with the power unit.

Check Hydraulic Fluid quality. Replace Hydraulic fluid as needed. Please dispose properly.

Hydraulic fluid may be drained into a container, or pumped out using a portable drill pump.

Cloudy/Milky hydraulic fluid (water contamination) - Replace Fluid & Filter

Dirty or Discolored Hydraulic Fluid - Replace Fluid & Filter

Change the fluid filter every 200 hours of operation. *More often under extreme conditions*Test the hydraulic flow and pressure periodically using the REL-FPG in-line gauge.

Install the REL-FPG between the pressure and return hoses. (where the tool would be installed)

Set the flow selector on the power unit to OFF.

Fully OPEN the restrictor valve on the REL-FPG.

Start the Engine and run until unit has warmed up.

#### CHECKING HYDRAULIC FLOW

Move the Power Unit CONTROL VALVE to the ON position. Switch the FLOW SELECTOR to 5 or 8 gpm.

Observe FLOW GAUGE for the appropriate range. (+/-1 gpm)

If the selected flow range is not achieved contact your local Reliable Equipment Sales / Service representative for additional assistance or instruction.

#### CHECKING HYDRAULIC PRESSURE AND RELIEF SETTINGS.

Slowly close the restrictor valve of the REL-FPG.

The flow should remain within range. The pressure should increase to approximately 2,000 psi.

As the pressure increases beyond 2,000 psi you may observe regular sudden drops in the pressure as the factory set relief valve is activated.

If the hydraulic pressure achieved does not reach an acceptable operating pressure (1,800 to 2,000 psi) contact your local Reliable Equipment Sales/Service representative for additional assistance or instruction.

If the relief valve is not redirecting the pressure between 2,100 and 2,200 psi (148-155 bar) the relief valve may require adjustment.

#### ADJUSTING THE HYDRAULIC RELIEF SETTINGS

The RELIEF VALVE may be found behind the CONTROL PANEL on the right side of the Power Unit. (refer to page 9)

Use an Open End or Box Wrench to loosen the nut on the RELIEF VALVE.

Adjust the relief setting by turning an Allen Wrench clockwise to increase the operating pressure, and counterclockwise to reduce the pressure.

**NOTE:** The RELIEF VALVE has been factory set. **<u>DO NOT</u>** alter factory setting.



#### TROUBLESHOOTING TIPS AND FIELD SOLUTIONS

	NO FUEL	CHECK FUEL - ADD AS REQUIRED
ENGINE WILL NOT START	FLOW SELECTOR ENGAGED	RETURN SELECTOR TO THE OFF POSITION
	WEAK BATTERY OR BATTERY NOT CONNECTED	TEST BATTERY - CHARGE OR REPLACE CHECK CONNECTION AND CABLES
REFER TO THE ENGI	NE MAINTENANCE & OPERATION	MANUAL FOR ADDITIONAL SOLUTIONS.
	CONTROL VALVE NOT ON	MOVE VALVE TO THE ON POSITION
	FLOW SELECTOR NOT ENGAGED	MOVE SELECTOR TO REQUIRED SETTING
	HYDRAULIC FLUID LEVEL LOW	CHECK FLUID LEVEL - ADD AS REQUIRED
	INCORRECT HOSE CONNECTION	ENSURE PROPER FLOW PATH TO TOOL
TOOL WILL NOT RUN	TOOL IS NOT WORKING OR SET UP PROPERLY	REFER TO TOOL MANUAL FOR OPERATION TOOL SPECIFICATIONS AND INSTRUCTION
		TEST WITH ANOTHER TOOL IF AVAILABLE
	DEFECTIVE COUPLERS	INSPECT ALL COUPLERS (ENGINE OFF)
	PUMP COUPLING OR HOSES DISCONNECTED OR KINKED	TURN ENGINE OF F. INSPECT HOSES AND COUPLERS ALONG FLUID PATH.
FLUID LEAKING FROM RESERVOIR VENT	HYDRAULIC TANK OVER FULL	CORRECT THE FLUID LEVEL

IF THE ISSUE OR THE SOLUTION IS NOT FOUND ABOVE CONTACT YOUR RELIABLE SERVICE REPRESENTATIVE

WARNING: ALL tool repair and service must be performed by authorized and trained personnel ONLY. Improper maintenance or tampering could result in malfunction causing damage to equipment and/or injury to personnel.

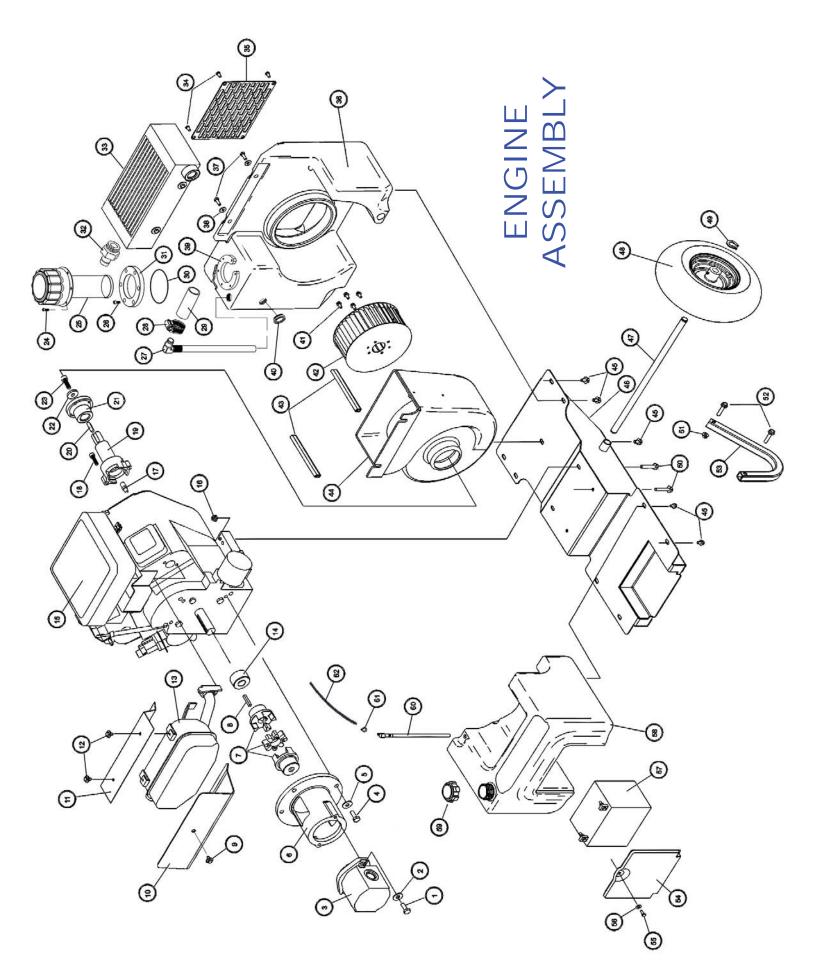
NOTICE: The engine speed and performance of this Power Unit has been factory configured and tested to provide SAFE and consistent tool operation.

ATTEMPTING TO ADJUST OR ALTER THE PERFORMANCE MAY DAMAGE THE PUMP, AND WILL VOID ALL WARRANTIES.

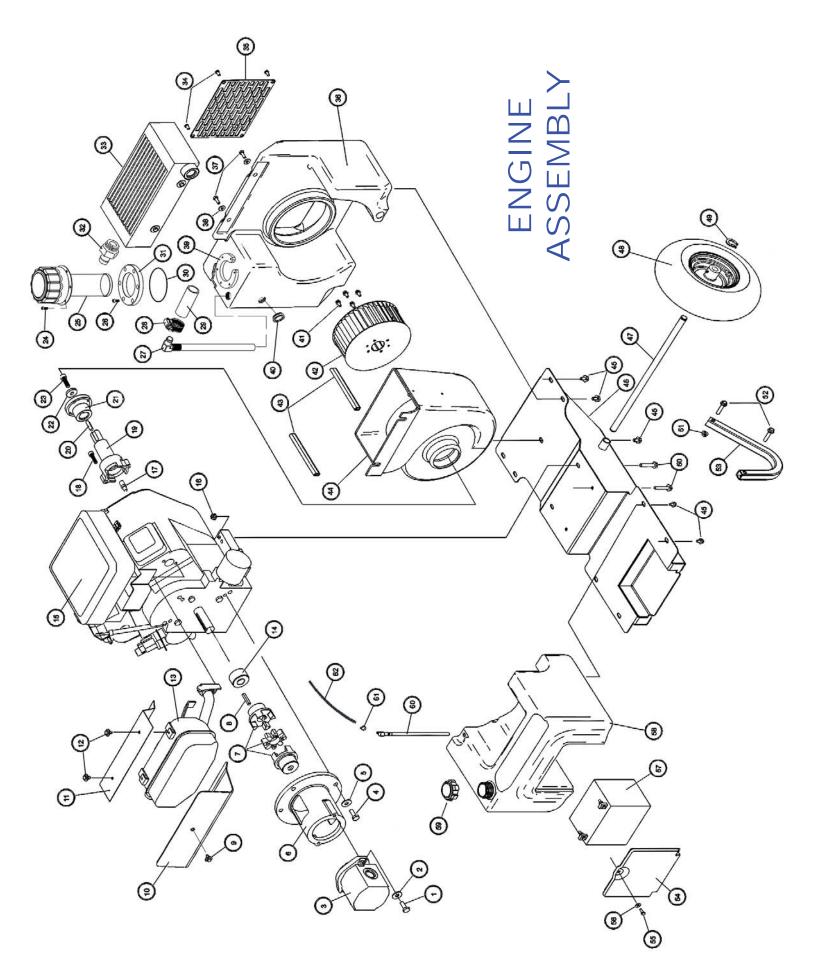
**Complete disassembly is not recommended.** Return the unit to an authorized dealer for total disassembly and/or repair.

All maintenance or disassembly should take place on a flat, clean work surface covered with towels or wipers so as to have a clean space for the disassembled parts. Inspect each part during disassembly for wear, scratches, and cuts. Discard the worn or damaged parts and replace with new factory authorized parts.

O-rings are sensitive to sharp edges. Inspect closely for cuts or damage. A small cut will cause a leak. When assembling or disassembling O-rings, use hydraulic fluid as a lubricant to help disassembly or installation.

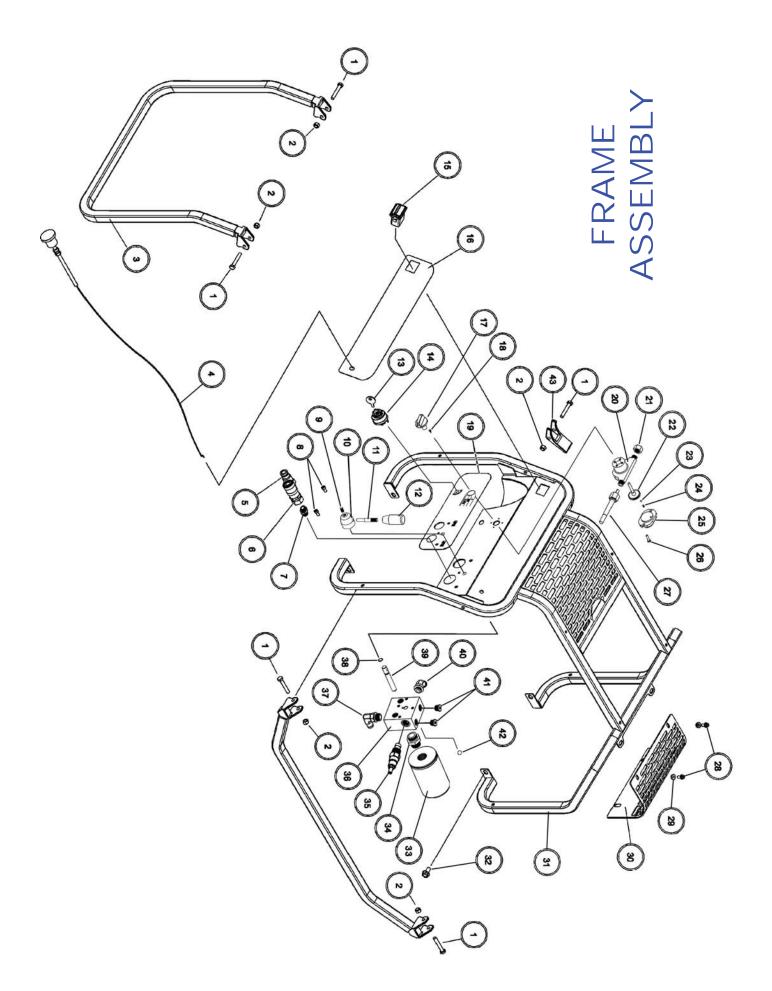


NO.	NAME	PART #QTY
1	SCREW	2
2	BUSHING	018002 2
3	GEAR PUMP	1
4	SCREW	018004 4
5	BUSHING	018005 4
6	PUMP COUPLING FLANGE	1
7	COUPLING	1
8	KEY	1
9	BOLT	3
10	LOWER INSULATION PLATE	018010 1
11	UPPER INSULATION PLATE	018011 1
12	BOLT	2
13	MUFFLER	1
14	SLEEVE	1
15	BRIGGS ENGINE	1
16	NUT	018016 4
17	STABLE PIN	1
18	BOLT	2
19	FAN SHAFT	1
20	FLAT KEY	1
21	FAN FLANGE	1
22	WASHER	1
23	BOLT	1
24	BOLT	018024 6
25	AIR FILTER	1
26	BOLT	018026 6
27	RETURN COUPLER	1
28	CLAMPS	018028 2
29	RETURN HOSE	1
30	O-RING	1
31	AIR FILTER FLANGE	1
32	COUPLER	1
33	RADIATOR	1
34	BOLT	018034 4



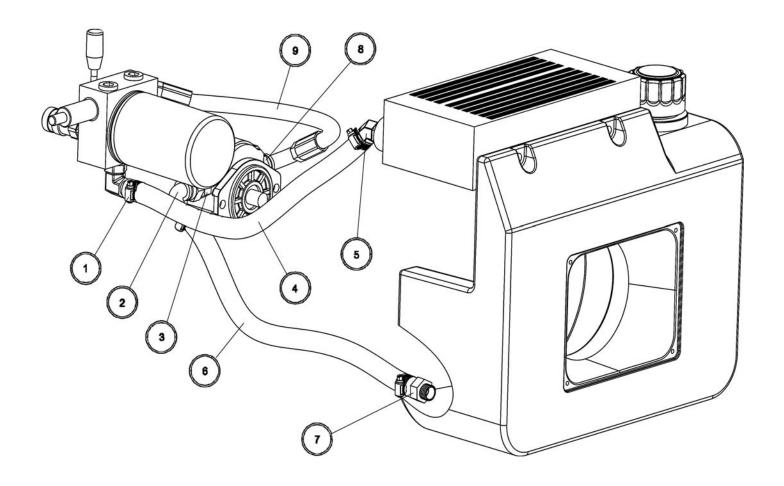
NO.	NAME	PART #	QTY
35	BAFFLE	018035	1
36	HYDRAULIC TANK	018036	1
37	BOLT	018037	2
38	BUSHING	018038	2
39	FLANGE	018039	1
40	OIL LEVEL VIEWER	018040	1
41	SCREW	018041	4
42	FAN WHEEL	018042	1
43	RUBBER BAR	018043	2
44	FAN CASE	018044	1
45	SCREW	018045	9
46	PLATE	018046	1
47	WHEEL SHAFT	018047	1
48	RUBBER WHEEL	018048	2
49	CLAMP SPRING	018049	2
50	SCREW	018050	4
51	NUT	018051	4
52	SCREW	018052	4
53	SUPPORT LEG	018053	2
54	BAFFLE	018054	1
55	SCREW	018055	1
56	CUSHION	018056	1
57	BATTERY	018057	1
58	GAS TANK	018058	1
59	OIL TANK CAP	018059	1
60	HOSE CONNECTOR	018060	1
61	CLAMP	018061	2
62	GAS HOSE	018062	1

IF YOU HAVE QUESTIONS REGARDING THE SERVICE AND REPAIR OF THIS POWER UNIT PLEASE CONTACT RELIABLE EQUIPMENT AT 800-966-3530.

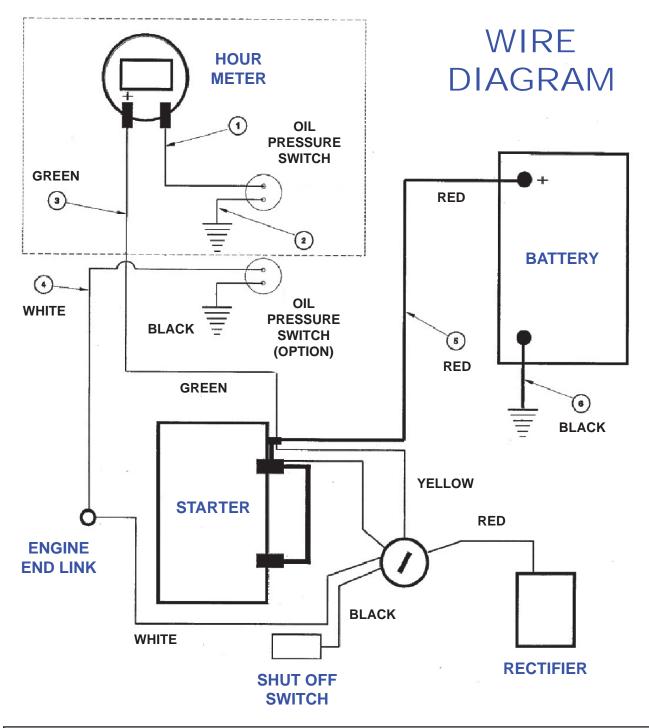


NO.	NAME	PART #	QTY
1	SCREW	018063	7
2	NUT	018064	7
3	HANDLE GRIP	018065	1
4	CHOKE ASSEMBLY	018066	1
5	MALE QUICK COUPLING	018067	1
6	FEMALE QUICK COUPLING	018068	1
7	HOSE FITTING	018069	2
8	SCREW	018070	2
9	SCREW	018071	1
10	SHAFT	018072	1
11	LEVEL	018073	1
12	HAND BALL	018074	1
13	STARTUP KEY	018075	2
14	STARTUP ASSEMBLY	018076	1
15	HOUR METER	018077	1
16	LABEL	018078	1
17	KNOB	018079	1
18	SCREW	018080	4
19	LABEL	018081	1
20	GEAR CASE	018082	1
21	NUT	018083	1
22	GEAR	018084	1
23	STEEL BALL	018085	1
24	SPRING	018086	1
25	GEAR CAP	018087	1
26	SCREW	018088	2
27	GEAR ASSEMBLY	018089	1
28	SCREW	018090	2
29	NUT	018091	2
30	BAFFLE	018092	1
31	FRAME	018093	1
32	SCREW	018094	2
33	HYDRAULIC FLUID FILTER ELEMENT	018095	1
34	HOSE CONNECTOR	018096	1
35	CARTRIDGE VALVES	018097	1
36	VALVE BLOCK	018098	1
37	HOSE CONNECTOR	018099	1
38	O RING	018100	1
39	VALVE ELEMENT	018101	1
40	HOSE CONNECTOR	018102	1
41	BLOCK		
42	CLAMP SPRING	018104	1
43	LOCK HANDLE		

# HOSES, FITTINGS AND CLAMPS



NO.	NAMEPAR	?T #QTY
1	HOSE CLAMP018	028 4
2	90 DEGREE ELBOW018	1061
3	ELBOW CONNECTOR018	1071
4	HOSE018	1081
5	HOSE CONNECTOR018	1091
6	HOSE018	110 1
7	HOSE CONNECTOR018	111 1
8	HOSE CONNECTOR018	112 1
9	HIGH PRESSURE HOSE018	113 1



NO.	NAMEQTY
1	WIRE ASSEMBLY (RED) 018114 1
2	WIRE ASSEMBLY (BLACK) 018115 1
3	WIRE ASSEMBLY (GREEN) 018116 1
4	WIRE ASSEMBLY (WHITE) 018117 1
5	WIRE ASSEMBLY (LG RED) 018118 1
6	WIRE ASSEMBLY (LG BLACK) 018119 1

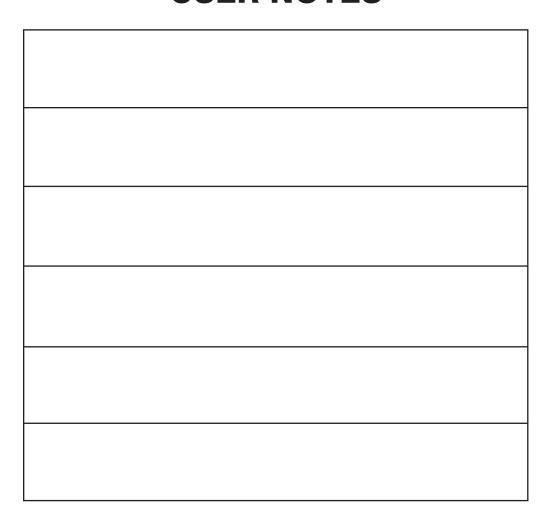
## **Maintenance Records**

Date	

## **Maintenance Records**

Date	

# **USER NOTES**







92 Steamwhistle Drive. Ivyland, PA 18974 Phone: 800-966-3530. Fax: 215-357-9193 Visit us on the web at www.Reliable-Equip.com



Read Manual



Protective Head Wear



Protective Eye Wear



Protective Clothing



Hearing Protection



Protective Foot Wear



Electrical Shock



Hot Surfaces



Hydraulic Injection